cen

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,569	02/07/2001	Thomas O'Neill	0007056-0163/P5640/RSH	4214

7590   08/13/2003

WAGNER, MURABITO & HAO LLP
Two North Market Street
Third Floor
San Jose,, CA 95113

EXAMINER
RAO, ANAND SHASHIKANT

ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 08/13/2003   *6*

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

     If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____ .

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

     a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)   4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5) ☐ Notice of Informal Patent Application (PTO-152)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6) ☐ Other: .

DETAILED ACTION

Drawings

1.   The informal drawings filed in this application are acceptable for examination purposes.

When the application is allowed, applicant will be required to submit new formal drawings.

Specification

2.   The lengthy specification has not been checked to the extent necessary to determine the

presence of all possible minor errors. Applicant's cooperation is requested in correcting any

errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Dixit.

Dixit discloses a method of intraframe transmission (Dixit: column 6, lines 22-37)

comprising: dividing a digital image into a plurality of regions (Dixit: column 7, lines 50-60);

selecting a first region wherein said first region is encoded with interframe compression (Dixit:

column 8, lines 13-15); and transmitting said regions (Dixit: column 8, lines 54-65), as claim 1.

Regarding claim 2, Dixit discloses that regions consist of a non-overlapping rectangular

group of pixels (Dixit: column 8, lines 1-5), as in the claim.

Regarding claim 3, Dixit discloses that the regions comprise strips of pixels (Dixit: column 8, lines 5-10), as in the claim.

Regarding claim 4, Dixit discloses that the regions comprise a plurality of non-contiguous pixel groups (Dixit: column 8, lines 9-11: "randomly selected blocks"), as in the claim.

Regarding claim 5, Dixit discloses that the selecting comprises determining one or more first groups of pixels wherein intraframe compression of said first groups results in better compression that interframe compression (Dixit: column 6, lines 30-50); and determining one or more second groups were not encoded without interframe compression within a number of transmission (Dixit: column 8, lines 25-55), as in the claim.

Regarding claim 6, Dixit discloses assigning a first number to a first pixel group; and selecting said first pixel group to be included in said first region for a transmission wherein said transmission is associated with a second number and said second number modulo a third number is equal to a said first number wherein said third number is a total number of regions (Dixit: column 8, lines 25-55), as in the claim.

Dixit discloses an interframe transmission unit (Dixit: column 6, lines 22-37) comprising: a dividing unit for dividing a digital image into a plurality of regions (Dixit: column 7, lines 50-60); a selection unit for selecting a first region wherein said first region is encoded with interframe compression (Dixit: column 8, lines 13-15); and a transmitter configured to transmit said regions (Dixit: column 8, lines 54-65), as claim 7.

Regarding claim 8, Dixit discloses that regions consist of a non-overlapping rectangular group of pixels (Dixit: column 8, lines 1-5), as in the claim.

Regarding claim 9, Dixit discloses that the regions comprise strips of pixels (Dixit: column 8, lines 5-10), as in the claim.

Regarding claim 10, Dixit discloses that the regions comprise a plurality of non-contiguous pixel groups (Dixit: column 8, lines 9-11: "randomly selected blocks"), as in the claim.

Regarding claim 11, Dixit discloses that the selecting comprises determining one or more first groups of pixels wherein intraframe compression of said first groups results in better compression that interframe compression (Dixit: column 6, lines 30-50); and determining one or more second groups were not encoded without interframe compression within a number of transmission (Dixit: column 8, lines 25-55), as in the claim.

Regarding claim 12, Dixit discloses assigning a first number to a first pixel group; and selecting said first pixel group to be included in said first region for a transmission wherein said transmission is associated with a second number and said second number modulo a third number is equal to a said first number wherein said third number is a total number of regions (Dixit: column 8, lines 25-55), as in the claim.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dixit in

view of Krishnamurthy et al., (hereinafter referred to as "Krishnamurthy").

Dixit discloses a method of intraframe transmission (Dixit: column 6, lines 22-37)

comprising: dividing a digital image into a plurality of regions (Dixit: column 7, lines 50-60);

selecting a first region wherein said first region is encoded with interframe compression (Dixit:

column 8, lines 13-15); and transmitting said regions (Dixit: column 8, lines 54-65), as claim 13.

However, Dixit fails to disclose implementing the method as a computer program product

comprising computer readable codes corresponding to the steps of the method. Krishnamurthy

discloses a region based refreshing method for video coding (Krishnamurthy: column 3, lines 3,

liens 10-61) that is implemented as computer readable codes on a computer program product in

order to have said method executable by a general-purpose computer (Krishnamurthy: column 4,

lines 5-24). Accordingly, given this teaching, it would have been obvious for one of ordinary

skill in the art to implement the Dixit method as computer readable codes on computer program

product as shown by Krishnamurthy in order to have to the Dixit method executable by a general

purpose computer. The Dixit method, now implemented as computer readable codes on

computer program product as shown by Krishnamurthy, has all of the features of claim 13.

Regarding claim 14, the Dixit method, now implemented as computer readable codes on

computer program product as shown by Krishnamurthy, discloses that regions consist of a non-

overlapping rectangular group of pixels (Dixit: column 8, lines 1-5), as in the claim.

Regarding claim 15, the Dixit method, now implemented as computer readable codes on

computer program product as shown by Krishnamurthy, discloses that the regions comprise

strips of pixels (Dixit: column 8, lines 5-10), as in the claim.

Regarding claim 16, the Dixit method, now implemented as computer readable codes on computer program product as shown by Krishnamurthy, discloses that the regions comprise a plurality of non-contiguous pixel groups (Dixit: column 8, lines 9-11: "randomly selected blocks"), as in the claim.

Regarding claim 17, the Dixit method, now implemented as computer readable codes on computer program product as shown by Krishnamurthy, discloses that the selecting comprises determining one or more first groups of pixels wherein intraframe compression of said first groups results in better compression that interframe compression (Dixit: column 6, lines 30-50); and determining one or more second groups were not encoded without interframe compression within a number of transmission (Dixit: column 8, lines 25-55), as in the claim.

Regarding claim 18, the Dixit method, now implemented as computer readable codes on computer program product as shown by Krishnamurthy, discloses assigning a first number to a first pixel group; and selecting said first pixel group to be included in said first region for a transmission wherein said transmission is associated with a second number and said second number modulo a third number is equal to a said first number wherein said third number is a total number of regions (Dixit: column 8, lines 25-55), as in the claim.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bhargava discloses a system for tile coding of moving images.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Andy S. Rao whose telephone number is (703)-305-4813. The

examiner can normally be reached on Monday-Friday 8 hours.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chris S. Kelley can be reached on (703)-305-4856. The fax phone numbers for the

organization where this application or proceeding is assigned are (703)-308-6606 for regular

communications and (703)-308-6606 for After Final communications.

        Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703)-305-4700.

                                        Andy S. Rao
                                        Primary Examiner
                                        Art Unit 2613

asr
August 8, 2003